

Claims

1. An apparatus for presenting a composite image conveying eye contact with a conference participant, comprising:

5 a composite image generator communicatively coupled with at least two members of an imaging device collection, for repeatedly receiving an image from each image device in said collection at approximately a same time to provide a synchronized image collection of said images based upon observations of said participant by said at least two members of said imaging
10 device collection;

wherein said composite image generator is communicatively coupled to a motion video portal for providing a succession of said composite images based upon at least said synchronized image collection for presentation to a video delivery system;

15 wherein said video delivery system presents a second participant with a motion video stream conveying eye contact generated by said motion video portal based upon said composite image succession.

2. An apparatus that conveys eye contact with a conference participant,
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means for generating a composite image of said participant receiving at least two images of said participant;

wherein each image is comprised of a two-dimensional array of pixels ;

wherein said means for generating said composite image is comprised

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means for calculating at least one dense correspondence to determine a displacement in at least a first dimension for each of said pixels in at least one first of said images;

means for generating an interpolated image based upon said at least
5 one dense correspondence for each of said at least two images.

3. The apparatus of Claim 2, further comprising:

means for combining at least two of said interpolated images by using an averaging scheme to create said composite image.

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4. The apparatus of Claim 2, wherein said means for generating said interpolated image further comprises:

means for displacing each of said pixels in said image pixel arrays by a partial displacement in at least a first dimension.

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5. The apparatus of Claim 3, wherein said means for combining said interpolated images, is further comprised of:

means for combining corresponding pixels in said at least a second dimension to create said composite image pixel;

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wherein a sum of said partial displacements of said images is approximately equal to said displacement.

6. The apparatus of Claim 2, further comprising:

means for applying a rectifying transformation to said image.

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7. The apparatus of Claim 2, further comprising:

means for warping said image by said partial displacement to modify said image.